We claim:

1. A prostate specific membrane antigen (PSMA) derived peptide that is capable of eliciting an immune response comprising a sequence of the Formula I:

$X - X_1 - X - X - X - X - X - X - X_2$

wherein

each X_1 is independently selected from leucine or methionine;

each X_2 is independently selected from valine or leucine; and

each X is independently selected from any amino acid,

and fragments, elongations, analogs or derivatives of the PSMA derived peptide.

2. A PSMA derived peptide according to claim 1 selected from the group consisting of LLHETDSAV (SEQ ID NO: 1), VLAGGFFLL (SEQ ID NO: 2), ELAHYDVLL (SEQ ID NO: 3), LMYSLVHNL (SEQ ID NO: 4), MMNDQLMFL (SEQ ID NO: 5) and ALFDIESKV (SEQ ID NO: 6), or a fragment, analog, derivative or elongation of the PSMA derived peptide.

3. A PSMA derived peptide according to claim 1 selected from the group consisting of LLHETDSAV (SEQ ID NO: 1), VLAGGFFLL (SEQ ID NO: 2), ELAHYDVLL (SEQ ID NO: 3), LMYSLVHNL (SEQ ID NO: 4), MMNDQLMFL (SEQ ID NO: 5) and ALFDIESKV (SEQ ID NO: 6).

4. A fusion protein comprising the PSMA peptide as described in claim 1.

5. A nucleic acid molecule encoding a PSMA derived peptide according to claim 1.

6. A nucleic acid molecule encoding a PSMA derived peptide according to claim 5 comprising:

(a) a nucleic acid sequence as shown in any one of SEQ ID NOS:12-17 wherein T can also be U;

(b) a nucleic acid sequence that is complementary to a nucleic acid sequence of (a);

(c) a nucleic acid sequence that has substantial sequence homology to a nucleic acid sequence of (a) or (b);

(d) a nucleic acid sequence that is an analog of a nucleic acid sequence of (a), (b) or (c); or

(e) a nucleic acid sequence that hybridizes to a nucleic acid sequence of (a), (b), (c) or (d) under stringent hybridization conditions.

7. A nucleic acid molecule encoding a PSMA derived peptide according to claim 5 having a sequence selected from the group consisting of: SEQ ID NO:12; SEQ ID NO:13; SEQ ID NO:14; SEQ ID NO:15; SEQ ID NO:16; and SEQ ID NO:17.

8. An expression vector comprising a nucleic acid molecule of claim 5 and regulatory sequences suitable for expression of the nucleic acid molecule.

9. A host cell transformed with an expression vector of claim 8.

10. A composition for eliciting an immune response in an animal comprising an effective amount of a peptide according to claim 1 in admixture with a suitable diluent or carrier.

11. The composition of claim 10 further comprising an adjuvant.

12. A composition for eliciting an immune response in an animal comprising an effective amount of a nucleic acid according to claim 5 in admixture with a suitable diluent or carrier.

13. The composition of claim 12 further comprising an adjuvant.

14. A use of an effective amount of a peptide according to claim 1 to prepare a medicament to elicit an immune response in an animal.

15. A use of an effective amount of a fusion protein according to claim 4 to elicit an immune response in an animal.

16. A use of an effective amount of a nucleic acid molecule according to claim 5 to prepare a medicament to elicit an immune response in an animal.

17. A use of an effective amount of a composition according to claim 10 to prepare a medicament to elicit an immune response in an animal.

18. A use of an effective amount of a peptide according to claim 1 to prepare a medicament to treat cancer.

19. A use of an effective amount of a fusion protein according to claim 4 to prepare a medicament to treat cancer.

20. A use of an effective amount of a nucleic acid molecule according to claim 5 to prepare a medicament to treat cancer.

21. A use of an effective amount of a composition according to claim 10 to prepare a medicament to treat cancer.

22. A use according to claim 18 wherein the cancer is prostate cancer.